NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATIONS

Bid Opening 12-17-03

The following specifications are supplementary to the 2003 Edition of the *Standard Specifications for Road and Bridge Construction* as they apply to this Contract.

105.06 CHARACTER OF WORKERS ... **Page 38** **02-14-03**
03-14-03

Delete the first sentence of Section 105.06 C. in its entirety and insert the following:

When the methods and equipment to be used are specified, other methods and equipment shall not be used without authorization of the Engineer.

106.09 BUY AMERICAN PRODUCTS. **Page 48** **02-14-03**

Delete the heading of Section 106.09 and replace with the following:

106.09 BUY AMERICA PRODUCTS.

107.04 HISTORIC PRESERVATION RESPONSIBILITIES. **Page 50 & 51** **06-20-03**

Delete the first paragraph of Section 107.04 A. in its entirety and replace with the following:

A. **Department Owned or Optioned Areas.** When the Contractor is operating within the right of way, easement areas, or within Department optioned areas and encounters the remains of prehistoric dwelling sites, human burials, or historical or archeological artifacts, operations at that location shall be temporarily discontinued. The Contractor shall inform the Engineer and the Department's Cultural Resource Section of the discovery and shall move construction operations to another part of the project. The Contractor shall not resume construction operations until the Department obtains clearance from the State Historic Preservation Officer (SHPO). The Contractor will make all reasonable efforts to protect the material until the matter has been reviewed by the SHPO. If cultural resources are discovered that are eligible for inclusion in the National Register of Historic Places, compliance with Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation "Procedures for the Protection of Historic and Cultural Properties" (36 CFR, Pt. 800) will be required. When directed, the Contractor shall excavate the site to preserve the artifacts encountered. Such excavation shall be paid for as "Extra Work." If the Contractor fails to notify the Engineer of the discovery, the Contractor shall be liable for all standby costs, all damage incurred, and all costs associated with the salvage and preservation activities specified in this section.

107.04 HISTORIC PRESERVATION RESPONSIBILITIES. **Page 51** **06-20-03**
07-18-03

Delete the second and third paragraph of Section 107.04 B. in their entirety and replace with the following:

> The Department shall review the furnished legal description and map to determine if the area has been previously utilized as a material source for a Department project. Within 14 days from the receipt of the legal description and map, the Department shall inform the Contractor of the status of the cultural resources in the proposed material source. If the Department finds that cultural resource work is necessary, the Contractor shall take the necessary action to appropriately satisfy Section 106 of the NHPA. Typically this begins with (but is not necessarily limited to) a Class III Cultural Resource Inventory. Every material source must be subject (minimally) to a Class III Cultural Resource Inventory. If the Department determines that a moderate or higher potential does exist, the Contractor must obtain clearance from the SHPO before any operations can be initiated. The Contractor is responsible for any and all costs associated with the cultural resource work necessary to fulfill Section 106 of the NHPA. The Department will not be responsible for, or share in any costs associated with Section 106 compliance on contractor-optioned material sources. The Contractor will not receive payments or compensation for delays resulting from the Department review.
>
> The Department review and subsequent independent completion of the Section 106 process will not relieve the Contractor of the responsibility of complying with all federal and state laws and regulations which govern the salvage and preservation of any cultural resources that are discovered during pit or borrow operations. In the event of a discovery, the procedures specified in Section 107.04 A shall be followed, except that the Contractor shall be liable for all standby costs, all damages incurred, and all costs associated with the salvage and preservation activities.

107.05 RESPONSIBILITY TO THE PUBLIC. **Page 52** **11-21-03**

The following sentence shall be added after the fourth sentence of the second paragraph of Section 107.05 A.1.:

> … and farms. Details on location of access points and construction procedures shall be worked out with the Engineer in the field prior to the start of the project. The cost of …

107.05 RESPONSIBILITY TO THE PUBLIC. **Page 56** **11-21-03**

The following paragraph shall be added to Section 107.05 D.:

> The Contractor shall protect the existing pavement outside of the construction limits during the course of construction. Surface repair which is required because of the Contractor's operations, other than designated haul roads, shall be repaired by the Contractor at the Contractor's expense.

151.03 HAULING EQUIPMENT. **Page 90** **04-11-03**

Delete Section 151.03 A. in its entirety and insert the following:

A. **Water-Hauling Equipment.** Water hauling units shall be equipped with a spraying device capable of evenly distributing water over the designated area. The water tank and all connections shall be watertight.

151.07 SCALES. **Page 96** **06-20-03**

Insert the following paragraph as paragraph 2 to Section 151.07 E. 1.:

Loader Bucket Scales shall comply with the requirements of items 2 through 4 of this Section. The weight indicated shall be accurate to within 1.0 percent of the true weight.

153.06 ROADBED PLANERS. **Page 106 & 107** **04-11-03**

Delete the first sentence of the second paragraph in its entirety and insert the following:

The planer shall be equipped with rotary cutting mechanisms capable of trimming the subgrade and base to the required lines and grades within the tolerances of Section 302.04 F.3 Surface Tolerance Type C.

203.02 CONSTRUCTION REQUIREMENTS. **Page 123** **11-21-03**

The following shall be added to Section 203.02 A.:

6. **Coal.** When coal is encountered, it shall be removed to a depth of 6 feet below the final profile grade between the graded shoulders. From the graded shoulders to the top of the backslopes, it shall be removed to a depth of 1 foot below the final profile grade. All coal removed shall be paid for as Common Excavation.

203.02 CONSTRUCTION REQUIREMENTS. **Page 123** **11-21-03**

The following two sentences shall be added after the first sentence of Section 203.02 B.:

… grading limits. Salvaged topsoil that is stockpiled within the clear zone must be stockpiled in a manner that is safely traversable. The stockpile must have slopes which are 4:1 or flatter if they are located within the clear zone. Additional areas …

210.04 METHOD OF MEASUREMENT. **Page 135** **11-21-03**

The following paragraph shall be added to Section 210.04 B.:

Excavation shall include Channel Excavation, Class 1 Excavation, and Class 2 Excavation unless these are specified as separate bid items.

230.02 CONSTRUCTION REQUIREMENTS. **Page 138** **11-21-03**

The following two sentences shall be added after the first sentence of Section 230.02 A.4.:

… the Engineer. Salvaged topsoil that is stockpiled within the clear zone must be stockpiled in a manner that is safely traversable. The stockpile must have slopes which are 4:1 or flatter if they are located within the clear zone. Topsoil shall …

304.04 CONSTRUCTION REQUIREMENTS. **Page 155** **02-14-03**

Delete the first sentence in Section 304.04 B.2. and insert the following:

2. Compaction. Compaction of the permeable base shall be according to Section 302.04 D. except the roller shall be a 10 ton, double drum, steel wheeled roller.

306.04 CONSTRUCTION REQUIREMENTS. **Page 160** **02-14-03**

Delete the second sentence of Section 306.04 H. in its entirety and insert the following:

The surface shall be finished using a Surface Tolerance Type B as specified in Section 302.04 F.

401.05 METHOD OF MEASUREMENT. **Page 173** **05-16-03**

Delete paragraph C. of Section 401.05 in its entirety.

401.06 BASIS OF PAYMENT. **Page 173** **05-16-03**

Delete the Pay Item Water in Section 401.06 in its entirety.

408.04 CONSTRUCTION REQUIREMENTS. **Page 192** **03-14-03**

Section 408.04 B., the following sentence shall be added at the end of the second paragraph:

The Contractor will provide the bitumen, aggregate and blend portions to the Department for the mix design a minimum of 7 days before production begins.

408.04 CONSTRUCTION REQUIREMENTS. **Page 192** **03-14-03**

Delete footnote 3 of the mix design table in Section 408.04 B., in its entirety and insert the following:

The mix design will be approved if the laboratory mix meets one of the three properties, % VMA, Fines/Asphalt Ratio, Film Thickness and all of the other specified properties.

408.06 METHOD OF MEASUREMENT. **Page 203** **11-21-03**

The following shall be added to Section 408.06:

D. **Continuous Rumble Strip.** When a bid item is included in the plans, the quantity for rumble strips is measured by project length for each shoulder per mile, and paid for by plan quantity. No deduction in length will be made for discontinued rumble strips as identified in the notes in the standard drawings.

408.07 BASIS OF PAYMENT. **Page 204** **04-11-03**

The following item shall be added to this section:

Pay Item	**Pay Unit**
Rumble Strips	Each or Mile

409.04 CONSTRUCTION REQUIREMENTS. **Page 206** **03-14-03**

Delete the words “Special Provision” in line 11 of the first paragraph under Quality Control Plan in Section 409.04 and insert the word “Specification”.

409.04 CONSTRUCTION REQUIREMENTS. **Page 207** **03-14-03**

Delete the following sentence in lines 5 and 6 of the second paragraph of Section 409.04 A., in its entirety:

The Department will develop the mix design for the project.

409.04 CONSTRUCTION REQUIREMENTS. **Page 208** **03-14-03**

Delete the statement “as revised in October 1998” in lines 3 and 4 in the first paragraph of Section 409.04 B., in there entirety.

409.04 CONSTRUCTION REQUIREMENTS. **Page 210** **02-14-03**

Delete the table for the Determination of Surface Area in Section 409.04 B.2.c. and insert the following table:

Determination of Surface Area

Sieve Analysis % Passing								
Sieve	Maximum Size	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
Combined Grading	***	***	***	***	***	***	***	***
Coefficient	0.02	0.02	0.04	0.08	0.14	0.30	0.60	1.60

410.02 MATERIALS. **Page 222** **02-14-03**

Delete Table 1 of Section 410.02 B. and insert the following:

Table 1
Initial Control Points for Superpave Aggregate Blend Gradation

Sieve Size	Nominal Aggregate Size* ½" (12.5 mm) % Passing	
	Min	Max
5/8" (15.9 mm)	100	100
½" (12.5 mm)	90	100
#8 (2.36 mm)	28	58
#200 (75 F)	2.0	7.0

*Nominal aggregate size is defined as one sieve size larger than the first sieve to retain more than 10 percent.

410.04 CONSTRUCTION REQUIREMENTS. **Page 228** **02-14-03**

Delete the table for the Determination of Surface Area in Section 410.04 B.1. and insert the following table:

Determination of Surface Area

Sieve Analysis % Passing								
Sieve	Maximum Size	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
Combined Grading	***	***	***	***	***	***	***	***
Coefficient	0.02	0.02	0.04	0.08	0.14	0.30	0.60	1.60

410.04 CONSTRUCTION REQUIREMENTS. **Page 228** **02-14-03**

Delete the title of Table 5 in Section 410.04 B.1. and insert the following:

TABLE 5
MIX DESIGN

410.04 CONSTRUCTION REQUIREMENTS. **Page 229** **02-14-03**

Delete Section 410.04 B.2.c and 410.04 B.2.d in their entirety and insert the following:

c. 1/2% above the optimum AC content determined by the Trial Mix Design.

d. 1.0% below the optimum AC content determined by the Trial Mix Design.

410.04 CONSTRUCTION REQUIREMENTS. **Page 232** **11-21-03**

Delete the Allowable Working Ranges for Fine Aggregate Angularity and Clay Content in Table 8, Section 410.04 P.2. and replace with the following:

Fine Aggregate Angularity Not less than the minimum specified

Clay Content Not less than the minimum specified

410.04 CONSTRUCTION REQUIREMENTS. **Page 234** **11-21-03**

In the first sentence of the last paragraph of Section 410.05 A.1., delete “2$” and replace with “2%”.

410.05 ACCEPTANCE. **Page 236** **02-14-03**
03-14-03

Delete Section 410.05 C.1.b. in its entirety and insert the following:

b. Compact two gyratory specimens with each sample taken to determine the field gyratory density. The number of gyrations applied to the gyratory specimens shall be as specified in the plans or as specified by the Engineer, and the temperature of the mix shall be 270^0 F plus or minus 5^0 F; and

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550.04 CONSTRUCTION REQUIREMENTS. **Page 262** **11-21-03**

The following shall be added to Section 550.04 J.:

8. **Continuous Rumble Strips.** When a bid item is included in the plans, the quantity for rumble strips is measured by project length for each shoulder per mile, and paid for by plan quantity. No deduction in length will be made for discontinued rumble strips as identified in the notes in the standard drawings.

550.04 CONSTRUCTION REQUIREMENTS. **Page 265** **11-21-03**

Delete the last paragraph of Section 550.04 N. in its entirety and insert the following:

When bituminous pavement or any colored concrete is applied adjacent to P.C.C. pavement, the adjacent P.C.C. pavement shall be protected from spills and smears. Discolored P.C.C. pavement shall be cleaned at the Contractor’s expense. The P.C.C. pavement shall not be used to stockpile or mix any material unless approved by the Engineer.

550.05 METHOD OF MEASUREMENT. **Page 271** **02-14-03**

Add the following to the first paragraph in Section 550.05 D.:

When separate payment is not made for Doweled Expansion or Contraction Joint Assemblies, the cost to provide and install the assemblies will be incidental to the Concrete Pavement.

550.06 BASIS OF PAYMENT. **Page 272** **11-21-03**

The following item shall be added to this section:

Pay Item	**Pay Unit**
Non-Reinforced Concrete Pavement Cl. AE - Doweled	Square Yard

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570.04 CONSTRUCTION REQUIREMENTS. **Page 277** **02-14-03**

Delete the first paragraph in Section 570.04 A.1. and insert the following:

1. Restoring the Subgrade. Concrete in full depth repair areas shall be removed by lifting with adequately sized equipment that will minimize disruption to the existing subgrade. Construction equipment will not be allowed in areas where the concrete has been removed. Voids deeper than one inch beneath the removed concrete shall be filled and compacted with granular fill as directed by the Engineer.

570.04 CONSTRUCTION REQUIREMENTS. **Page 278** **07-18-03**
11-21-03

Delete the first two sentences of Section 570.04 A.8 and insert the following:

Shape the longitudinal joint reservoir 1/4-inch wide by 3/4-inch deep in areas of full-depth repairs. Clean the joint as directed by the Engineer and seal with a Type 2 Hot Applied Joint Sealant.

570.04 CONSTRUCTION REQUIREMENTS. **Page 282** **11-21-03**

The following shall be added to Section 570.04 C.2.:

l. **Opening to traffic.** The dowel bar retrofit portion of the project will not be opened to traffic until the surface has been ground.

602.03 CONSTRUCTION REQUIREMENTS. **Page 305** **11-21-03**

Delete the third sentence of Section 602.03 F.3. and replace with the following:

The wet cure material shall be placed and the wet cure started no later than 30 minutes after the finish of the completed area.

704.03 CONSTRUCTION REQUIREMENTS. **Page 388** **03-14-03**

Delete the last sentence of the second paragraph after Section 704.03 A.3 and insert the following:

The Contractor shall provide documentation showing the requirements are being met for any sign supports used that do not comply with NDDOT's Standard Drawings.

704.03 CONSTRUCTION REQUIREMENTS. **Page 394** **07-18-03**
08-15-03

The following shall be added to Section 704.03 U.:

3. **Traffic Signal Maintenance.** On projects where permanent or interim traffic signals are being installed, the Contractor shall designate an experienced person in this area that can troubleshoot any possible problems that may occur with the traffic signal maintenance. This maintenance person shall be in addition to the traffic control supervisor and the watchperson as specified in Sections 704.03 U.1 and 704.03 U.2.

   The traffic signal maintenance person, or experienced alternate, must be accessible to the job site within one hour of notification and be "on call" on a 24-hour basis. In the event of emergency control, refer to Section 704.03 V.

   The Contractor shall be required to maintain the interim or permanent traffic signals until the project has been accepted by the Engineer.

704.03 CONSTRUCTION REQUIREMENTS. **Page 394** **07-18-03**
08-15-03

Delete the first sentence of Section 704.03 V. in its entirety and replace with following:

V. **Emergency Control.** Written notification shall be provided to the Engineer, the State Police, and local law enforcement agencies, of the names, addresses, and the telephone numbers of the Contractor's Superintendent, an alternate for the superintendent, Traffic Control Supervisor, Watchperson, and Traffic Signal Maintenance Person.

708.02 SEEDING, SODDING, AND MULCHING. **Page 409** **08-15-03**

The following shall be added to Section 708.02 C.1.h.:
Hydroseeding completed after October 1 will not be provided Temporary Care. However, hydroseeding completed after October 1 will not be accepted until it shows evidence of established growth after May 15 of the following year.

The following Section shall be added:

708.07 SILT FENCE.

A. **Description.** This work shall consist of furnishing, installing, maintaining, and removing a geotextile barrier-fence designed to remove suspended particles from storm water runoff. The quantities of silt fence shown on the plans may be increased or decreased as directed by the Engineer based on weather, contractor operations or actual site conditions that occur during construction of the project. Such variations in quantity will not be considered as a change in character of work. A Pre-Fabricated silt fence will not be allowed.

B. **Materials.**

1. **Posts.** Either wood or steel posts may be used. Wood posts shall be treated (Penta or Green Treated) and shall be a minimum of 6 feet long with minimum dimensions of 2 inches diameter for round posts or 1 ½ inches by 1 ½ inches for rectangular posts. Steel posts shall be a minimum of 5 feet long, weigh a minimum of 1.3 lbs/ft and have projections to aid in fastening the wire or fabric. Steel posts should also have a metal plate welded near the bottom such that when the post is driven to the proper depth, the plate will be below the ground level for added stability.

2 **Woven Wire.** When backing for a filter fabric silt fence is required, a steel wire fence fabric shall be used. A woven wire fence shall conform to ASTM A 116, Class 1 zinc coating for wire. The woven wire support fence shall be at least 32 inches high and a maximum opening size of 6 inches by 6 inches. The wire shall be a minimum of 14 gage grade 60.

3. **Filter Fabric.** Silt fence fabric shall conform to AASHTO M 288 silt fence specification. Filter fabric shall be composed of fibers consisting of long chain synthetic polymers composed of at least 95% by weight of polyolefins, polyesters or polyomides. The fibers shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other. The filter fabric shall be free of any treatment or coating which might adversely alter its physical properties after installation. The fabric shall be free of deflects or flaws that significantly affect its physical and/or filtering properties. The fabric shall have a minimum width of 36 inches. The filter fabric shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement.

   The filter fabric shall meet the minimum physical requirements contained in Table 1. Unless otherwise indicated, numerical values represent the minimum average roll value. The required numerical value for the AOS is the maximum allowable in SI Units and the minimum allowable in U.S. Standard Sieve Numbers.

Table 1

Property	Test Method	Supported *	Unsupported	Unsupported
Elongation	ASTM D-4632	N/A	>50 (non-woven)	<50 (woven)
Grab Tensile (lbs)				
Machine	ASTM D-4632	90	123	123
Cross Machine	ASTM D-4632	90	101	101
Permittivity (sec^{-1})	ASTM D-4491	0.05	0.05	0.05
Water Flow Rate (gpm / ft^2)	ASTM D-4491	4.43	4.43	4.43
AOS (US Sieve #) mm Sieve #	ASTM D-4751	0.600 #30	0.600 #30	0.600 #30
UV Resistance (%)	ASTM D-4355	70%@500hrs	70%@500hrs	70%@500hrs

* Silt fence support shall consist of 14 gage steel wire with a mesh maximum spacing of 6 by 6inches.

C. **Construction Requirements.**

In addition to the Standard Drawing shown in the plans the following will apply:

1. **Installation.** The geotextile at the bottom of the fence shall be buried in a "J" configuration to a minimum depth of 6 inches in a trench so that no flow can pass under the silt fence. Wire support fence if used shall also be buried a minimum of 2 inches. The trench on the upstream side of the silt fence shall be backfilled and the soil compacted over the geotextile.

   Silt fence fabrics shall be spliced together only at support posts with a minimum of 18 inches of overlap and in such manner to prevent silt from passing between the two ends. At the time of installation, the fabric or fence will be rejected if it has any defects, deterioration, or other damage incurred during manufacture, transportation, storage, or installation.

   Posts shall be spaced 4 feet apart and driven or placed a minimum of 20 inches into the ground. Depth shall be increased to 24 inches if fence is placed on a slope 3:1 or greater. Geotextiles shall be attached to posts by staples, wire, nails, or in accordance with the manufacturer's recommendations. Wire staples shall be a No. 17 gauge minimum and shall have a minimum 0.75 in. wide crown and 0.5 in. long legs. Staples shall be evenly placed with at least 4 per post. Nails shall be a minimum of 14 gauge, 1 inch long, with 0.75 button heads. Nails shall be evenly spaced with at least 4 per post.

   Silt fences should be continuous and transverse to the flow. The silt fence should follow the contours of the site as closely as possible. The fence shall also be placed such that the water cannot runoff around the end of the fence.

2. **Maintenance.** Sediment deposits shall be removed when the deposit reaches half of the height of the silt fence at the lowest area. Silt fence shall be inspected by the Contractor immediately after each rainfall and at least daily during prolonged rainfall. Any deficiencies shall be immediately corrected. Filter fabric shall be removed and replaced whenever it has deteriorated to such extent

that it reduces the effectiveness of the silt fence. In addition, the Contractor shall make daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, additional silt fences may be installed as directed by the Engineer.

If a silt fence, or portion of a fence, is located in an area where removing the sediment is not possible, then a second silt fence may be installed at the discretion of the Engineer. In this case, the silt fences or portions involved, will be measured and paid for at the unit price for silt fence.

Silt fence shall remain in place until the Engineer directs that it be removed. Upon removal, the Contractor shall dress the area to give a pleasing appearance, and vegetate all bare areas in accordance with the contract requirements. If the new reshaped area still poses an erosion threat, the Engineer may have a new silt fence erected. The fence materials will remain the property of the Contractor.

D. **Method of Measurement.** Silt fence will be measured to the nearest linear foot of fence actually installed in accordance with the plans or as required by the project Engineer. The measurement for payment excludes the fabric or fence material used for overlapping as well as fabric used for seam overlaps.

Temporary silt fence will be paid for per linear foot in place and shall be full compensation for completing the work specified.

E. **Basis of Payment.**

Payment will be made at the Contract Unit Price for the following:

Pay Item	**Pay Unit**
Silt Fence	Linear Foot Installed

This payment will be full compensation of furnishing all materials, labor, maintaining, and removing of the silt fence.

Cleaning of the sediment deposits shall be paid at the price listed in the “Price Schedule PS-1.”

709.03 CONSTRUCTION REQUIREMENTS. **Page 420** **11-21-03**

The following paragraph shall be added to Section 709.03 B.:

Geotextile fabric for wrapping the joints of pre-cast box culverts shall meet the specifications of Section 858.01 A., separation fabric Type S2.

720.03 CONSTRUCTION REQUIREMENTS. **Page 430** **06-20-03**

The following paragraph shall be added to Section 720.03 A.:

All concrete alignment monuments shall be precast. Precast concrete alignment monuments will be furnished and placed by the Contractor on all centerline alignment PI’s, section corners, quarter corners, and on section lines crossing the centerline alignment as shown on the Standard Drawings. When centerline alignment PI’s are located outside the highway right of way, an iron monument (defined in the Standard Drawings) may be placed in lieu of the precast concrete alignment monuments. The precast concrete alignment monuments shall be placed on all grading projects, and all other projects where

existing monuments will be disturbed. A licensed Registered Land Surveyor (including the Contractor's surveyor) must be involved in the placement and recording of all Public Land Corners (section corners and quarter corners), section line crossings, and PI monuments as required by the N.D.C.C. The costs associated with concrete monuments are to be included in the pay item "Monuments". A licensed Registered Land Surveyor is not required to be involved in the placement of the other alignment monuments, right of way markers, and right of way monuments. The price bid for "Monuments" shall include the cost of materials, installation, and the Registered Land Surveyor as required.

754.03 CONSTRUCTION REQUIREMENTS. **Page 454** **03-14-03**

Remove all references to Flange Channel in Section 754.03 E.3.

754.03 CONSTRUCTION REQUIREMENTS. **Page 454** **05-16-03**

Delete the first two sentences in Section 754.03 E.4. in their entirety and insert the following:

4. **Tubular Sign Supports.** When a sign support is required, a Tubular Sign Support shall be used. Tubular Sign Supports

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754.03 CONSTRUCTION REQUIREMENTS. **Page 454** **06-20-03**

Delete the word "base" in line 3 in Section 754.03 E. 4. and insert the word "foundation".

754.03 CONSTRUCTION REQUIREMENTS. **Page 454** **05-16-03**

Add the following sentence to Section 754.03 E.4:

Welders shall meet the requirements of Section 105.06 D.

754.03 CONSTRUCTION REQUIREMENTS. **Page 457** **07-18-03**

Delete the last sentence of Section 754.03 E.6.a. in its entirety.

754.03 CONSTRUCTION REQUIREMENTS. **Page 458** **06-20-03**

Delete Section 754.03 H. in its entirety and replace with the following:

H. Remove Sign Foundations. This item consists of removing signs, steel supports, and foundations or H-pile footings and restoring the surface to match the surrounding area. Foundations and H-pile footings shall be removed to a depth of 2 feet below the ground line unless otherwise specified in the plans. The signs, steel supports, H-pile footings and foundations removed shall become property of the Contractor and be disposed of outside the highway right of way.

754.04 METHOD OF MEASUREMENT. **Page 459** **03-14-03**

Remove all references to Flange Channel in Section 754.04 B.

754.04 METHOD OF MEASUREMENT. **Page 460** **05-16-03**

Delete the first line of Section 754.04 B.2 in its entirety and insert the following:

2. **Galvanized Steel Posts – Standard Pipe.** Pipe post signs will be

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754.04 METHOD OF MEASUREMENT. **Page 460** **07-18-03**
08-15-03

Delete the last sentence of Section 754.04 B.3 in its entirety and insert the following:

The post length and the 14 foot pile length as shown in the plans, will be included in the length of the post to be measured and paid for.

754.04 METHOD OF MEASUREMENT. **Page 461** **06-20-03**

Delete the first sentence in Section 754.04 K. in its entirety and insert the following:

K. **Remove Sign Foundations.** The item “Remove Sign Foundations” will be measured by the number of foundations and H-piling footings removed.

754.05 BASIS OF PAYMENT. **Page 461** **03-14-03**

Remove all references to Flange Channel in Section 754.05.

754.05 BASIS OF PAYMENT. **Page 461** **05-16-03**

Delete the Pay Item _____” Galvanized Steel Post – Standard Pipe (Single Post) in Section 754.05 in its entirety and insert the following:

_____” Galvanized Steel Post – Standard Pipe

762.02 MATERIALS. **Page 462** **04-11-03**

Delete Section 762.02 in its entirety and replace with the following:

Pavement Marking material shall meet the following:

Item	Section
Pavement Marking Paint*	880.01
Glass Beads for Pavement Marking Paint	880.02
Plastic Pavement Marking Film*	880.03
Preformed Plastic Marking Film	880.04
Preformed Patterned Pavement Marking Film	880.05
Short-Term Pavement Marking	
Paint	880.06
Tape	880.06
Construction Zone Marking	880.07
Raised Pavement Markers	880.08
Epoxy Paint Pavement Marking	880.09

*Either “slow,” “medium,” or “fast dry” paint and either type of Plastic Marking Film may be used.

762.05 METHOD OF MEASUREMENT. **Page 475** **03-14-03**

In Section 762.05 C.3. and Section 762.05 C.5., delete “Type KNURL” and replace with “Type NR”.

762.06 BASIS OF PAYMENT. **Page 476** **03-14-03**

Delete the Pay Item Short Term-___-Inch Line, Type KNURL in Section 762.06 and insert the following:

Short Term-___-Inch Line, Type NR

772.03 CONSTRUCTION REQUIREMENTS. **Page 30, Vol. 2.** **02-14-03**
03-14-03

Delete Sections 772.03 T.1, 772.03 T.2, and 772.03 T.3., and insert the following:

1. **Initial Inspection.** An initial functional inspection shall be made approximately 15 days after all signals or flashing beacons under the Contract are operational, except when snow or ice conditions are present preventing observation of installed equipment, or when extreme cold conditions prevent proper observation of equipment operations and adjustments.

    a. When the above conditions exist, the initial inspection will be delayed. The Engineer will determine when conditions have improved so the inspection can be scheduled.
    b. During the time of delayed inspection, all signals or flashing beacons in operation shall be maintained by the Contractor. When conditions permit initial inspection to be performed, the other inspections will be performed as specified.

2. **Final Inspection.** A final functional inspection will be made 30 or more days after the initial inspection. The Contractor will request the Engineer to schedule the final inspection. The Engineer shall notify the Traffic Operations Engineer to coordinate a time for the final inspection. The final inspection shall not be made until all items noted on the initial inspection have been corrected.Minor

finish work items, such as dirt leveling, will not prevent the final inspection. The traffic signals or flashing beacons shall be in operation during this time. When snow, ice or extreme cold conditions are present preventing the proper observation of the installed equipment, the final inspection will be delayed. The Engineer will determine when the conditions have improved so the inspection can be scheduled. The Contractor shall maintain the signals or flashing beacons during the period between the initial inspection and final functional inspection.

3. **Final Acceptance.** Final acceptance will not be made until the system has been operating for 14 consecutive days after the final inspection without interruption due to malfunctions attributable to defective equipment or improper workmanship. The Contractor shall be responsible for the electrical and communications costs for the system until the traffic signals and/or flashing beacons are accepted by the State.

816.03 AGGREGATES FOR SURFACING, BASE, ASPHALT MIXES, BLOTTER, AND SEAL COATS **Page 510** **06-20-03**

Remove No. 16 sieve requirements for Permeable Aggregate Base, Class 7, in Table I in Section 816.03 B. in its entirety.

818.02 SPECIFIC REQUIREMENTS. **Page 514** **03-14-03**
05-16-03

Delete Section 818.02 D.2. in its entirety and insert the following:

2. **Polymer Modified Cationic Emulsified Asphalt.** Grade CRS-2P shall meet the requirements AASHTO M 316-98.

818.02 SPECIFIC REQUIREMENTS. **Page 516** **05-16-03**
06-20-03

Delete the Ductility requirements from the property table in Section 818.02 E. in its entirety and replace with the following:

Property	**ASTM Test**	**HFMS-2**	**HFRS-2P**	**HFRS-2**
Ductility, 77^{o} F., 5cm/min., cm, min.	AASHTO T-51		40	40

822.02 TESTING. **Page 520** **03-14-03**

The following requirements shall be added to this section:

C. Treatment Penetration.

Test	**Minimum Depth**	**Method**
Penetration	0.15 inch	DOT Procedure

D. Vapor Permeability.

Treated concrete shall retain its moisture vapor permeability as determined by the Department's test procedure.

834.04 PERMANENT METAL CONCRETE FORMS. **Page 532** **02-14-03**

Delete the paragraph in Section 834.04 in its entirety and insert the following:

Permanent metal forms for concrete floor slabs shall be of zinc-coated (galvanized) steel sheets meeting ASTM A924 with coating class of G235 according to ASTM A635.

836.04 DOWEL BARS AND TIE BARS FOR PAVEMENT JOINTS. **Page 533** **08-15-03 11-21-03**

Delete the last paragraph in Section 836.04 in its entirety and insert the following:

Tie bars for the centerline joint and adjoining driving lanes in Portland Cement Concrete pavement shall be epoxy coated, meeting the requirements in 836.02 B. All other tie bars shall meet AASHTO M-31, Grade 40 deformed.

894.05 POSTS AND HARDWARE FOR SIGNS. **Page 575** **02-14-03**

In Section 894.05 B.1., second paragraph - “Section 5" should be “Section 6" and “Section 4" should be “Section 5.”

894.05 POSTS AND HARDWARE FOR SIGNS. **Page 577** **03-14-03**

In Section 894.05 B.4.h.(5) delete “1/6” and insert “1/16”.

894.05 POSTS AND HARDWARE FOR SIGNS. **Page 577** **03-14-03**

Delete all references to Flange Channel in Section 894.05 B.5. and 894.05 B.5.a.

894.06 DELINEATORS. **Page 579** **02-14-03**

Delete the table in Section 894.06 B.2.c. and insert the following:

OBSERVATION ANGLE degrees	ENTRANCE ANGLE degrees	COEFFICIENT OF LUMINOUS INTENSITY cd/lx		
		CRYSTAL	YELLOW	RED
0.1	0	11.0	6.6	2.7
0.1	20	4.4	2.6	1.0

895.03 CONDUCTORS. **Page 44, Vol. 2.** **02-14-03**

Delete the last two sentences of Section 895.03 B.2.a.

895.06 LIGHTING STANDARDS. **Page 46, Vol. 2.** **11-21-03**

Delete the last sentence of Section 895.06 F. and replace with the following:

The outlet box shall be welded inside of the pole, and the outlet cover shall be a water tight while-in-use cover. The festoon receptacle shall be provided with a single gang while-in-use cover. The body and plates shall be made of gray colored polycarbonate, with a gasket made of closed cell foam, neoprene blend regular density, UL rated HBF. Covers shall be mounted vertically with stainless steel screws. The cover shall comply with NEC requirements for installation in wet locations.

896.07 TRAFFIC CONTROL STANDARDS. **Page 64, Vol. 2.** **03-14-03**

In Section 896.07 B.1, second sentence – delete “AASHTO M-183” and replace with “ASTM A-36”.
